

# Crustacea, Decapoda, Portunidae, *Callinectes sapidus* Rathbun, 1896: New record and filling distribution gaps

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**ABSTRACT:** The blue crab *Callinectes sapidus* Rathbun, 1896 (Crustacea: Decapoda: Portunidae) is firstly recorded from the state of Sergipe, NE Brazil, filling a gap in the species distribution along Brazilian coast.

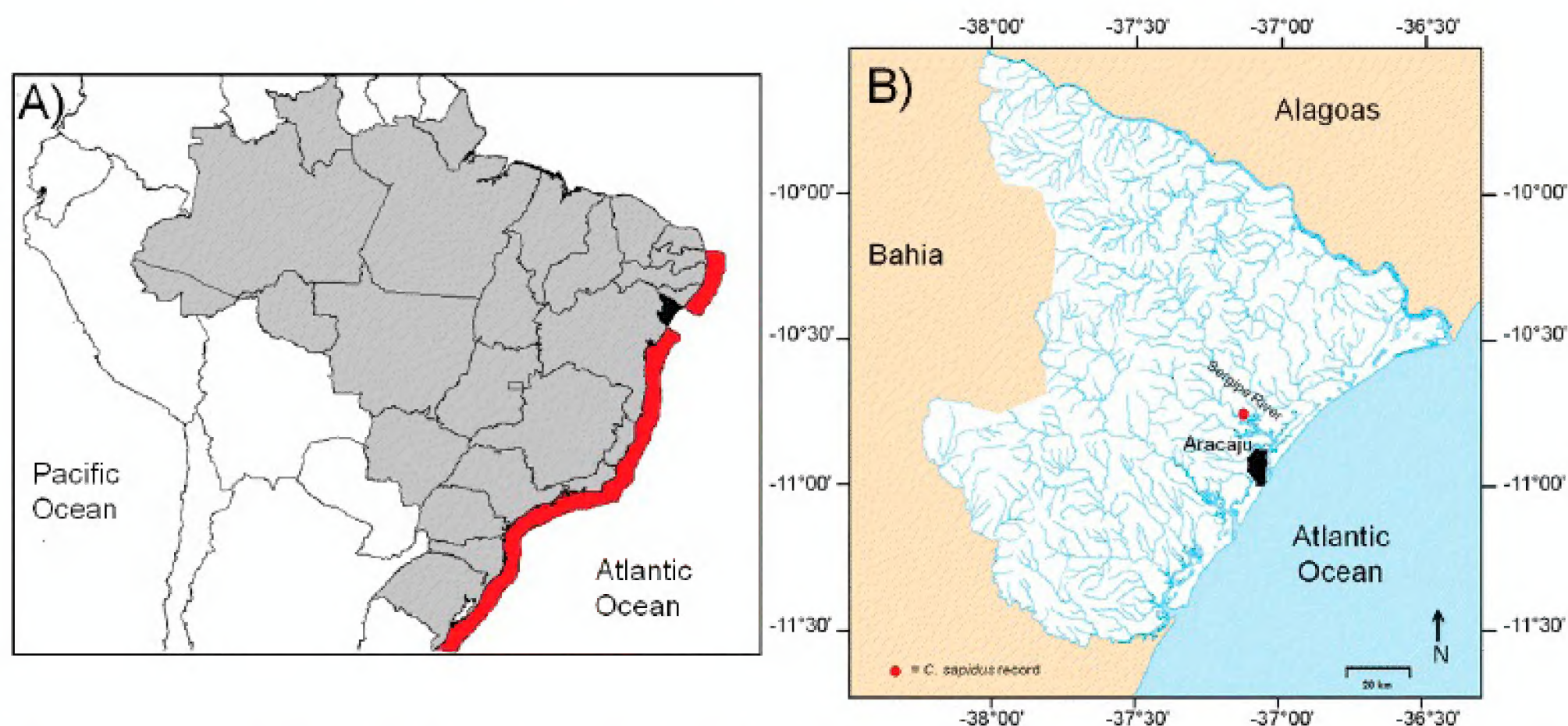
The blue crab *Callinectes sapidus* Rathbun, 1896 is an important fishery resource at several places along the Atlantic coast of America (Williams 1974; Milliken and Williams 1984; Stagg and Whilden 1997). Native from western Atlantic, this species has been also recorded in the eastern Atlantic, North Sea, Mediterranean Sea, Adriatic Sea, Black Sea, and the Indo-Pacific region (Japan) (Williams 1974; Milliken and Williams 1984; Melo 1996; 1999). Along the western Atlantic coast, *C. sapidus* has a disjunct distribution pattern, with a northern (from the United States to Venezuela) and a southern (from Paraíba, Brazil, to Argentina) population (Santos and D’Incao 2004). In Brazil, this species occurs from the state of Paraíba to Rio Grande do Sul (Melo 1996; 1998; 1999; Coelho *et al.* 2008; Ferreira *et al.* 2011), with a gap on the coast of state of Sergipe (Figure 1a).

On April 2011, one individual of *C. sapidus* was caught during fishing hauls, using a beach seine net 30 m long and 2.8 m height with a stretched mesh size of 5 mm, on a sandy bank located in the upper estuarine region of Sergipe

River, state of Sergipe, northeastern Brazil (10°45’58”S; 37°09’14”W) (Figure 1b). At this place, the water salinity ranged from 2 to 7 and the sediment was composed mainly by poorly sorted fine sand with 13-27% of fine fractions (*i.e.*, silt plus clay) and organic matter content around 2%. Samples were collected with permission of the Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio) and Sistema de Autorização e Informação em Biodiversidade (SISBIO), license number 32380-1. The specimen was fixed in formaldehyde 5% and deposited in the carcinological collection of the Núcleo de Engenharia de Pesca (NEP-CRUST 0013), Universidade Federal de Sergipe, São Cristóvão, Sergipe, Brazil.

According to Melo (1996), *C. sapidus* is the only species in the genus having 2 broad based, triangular teeth located on the front between the inner orbital teeth. The material examined agrees with this diagnostic feature.

Material examined: one immature female (Figure 2); width of the carapace at the base of the largest lateral spine measuring 48 mm, carapace length measuring 27.2



**FIGURE 1.** (A) Previously known geographic distribution of the blue crab *Callinectes sapidus* Rathbun, 1896 along Brazilian coast and (B) hydrological basins of the state of Sergipe indicating the site where *C. sapidus* was collected (red circle).

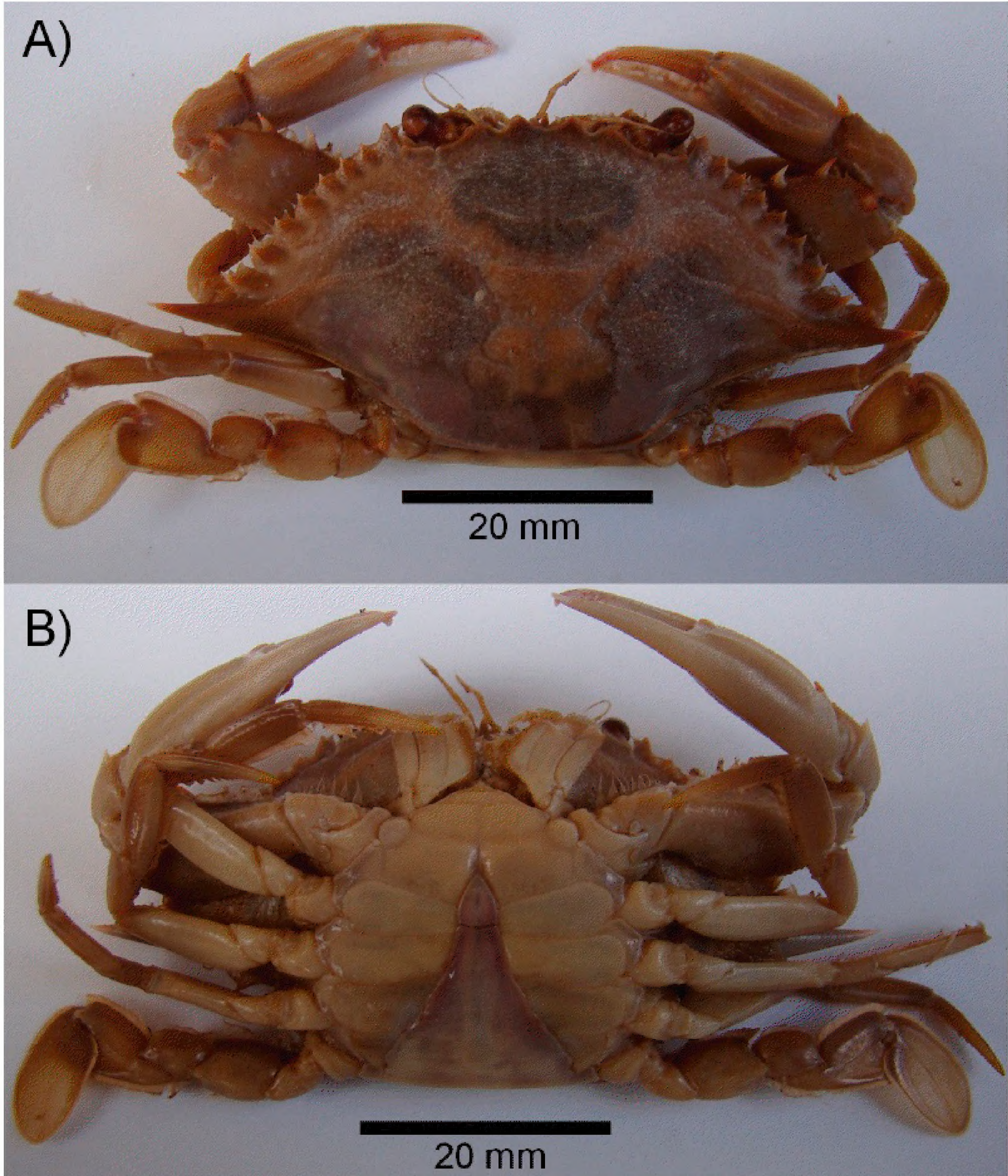


mm and wet weight of 10.7 g.

Of seven species of genus *Callinectes* found along the Brazilian coast, only *C. danae* Smith, 1869 and *C. ornatus* Ordway, 1863 have been previously recorded at Sergipe coast (Coelho *et al.* 2004; 2008). Others species of the Portunidae family from state of Sergipe are *Arenaeus cribarius* (Lamarck, 1818), *Cronius tumidulus* (Stimpson, 1871), *Portunus (Achelous) spinimanus* Latreille, 1819 and

*Portunus (Portunus) anceps* (Saussure, 1858) (Coelho *et al.* 2004; 2008).

The present record of *C. sapidus* represents the first from the state of Sergipe, filling a gap in the species distribution along the Brazilian coast between the states of Bahia and Alagoas, as well increases to seven the number of species of the Portunidae family know from state of Sergipe.



**FIGURE 2.** *Callinectes sapidus* Rathbun, 1896 (NEP-CRUST 0013). Immature female collected in the Sergipe River, state of Sergipe, Brazil. Dorsal (A) and ventral (B) views.



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